IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.:

TREUSCH - 4

TITLE

Stepped Microchannel Heat Sink

Application No.: Filing Date: Group Art Unit:

Commissioner for Patents P. O. Box. 1450 Alexandria, VA 22313-1430

INFORMATION DISCLOSURE STATEMENT

Herewith the Information Disclosure Statement Pursuant to 37 CFR 1.98. Copies of the cited documents are enclosed.

, Number	Date	Inventor	Assignee	Class	Notes
6480514	11/12/2002	Lorenzon	Jen Optik	372/35	μ-ch
6312166	11/06/2001	Zediker	Nuvonyx	385/88	vertical stack array
6229831	05/08/2001	Nightingale	Coherent	372/36	Stepped heat sink
5987043	11/16/1999	Brown	Opto Power	372/36	Stepped heat sink Figs 4-8
5848083	12/08/1998	Huden	SDL	372/36	Fig. 2E etched channels 134 in sheets 132
5212707	05/18/1993	Heidel	McDonnell Douglas	372/50	
5107091	04/21/1992	Wagner	Applied Solar Energy	1	μ-ch
5105430	04/14/1992	Mundinger	US DOE	372/35	μ-ch
5099910	03/31/1992	Walpole	MIT	165/80. 4	High speed dicing sawed SI (or CuW) µ-ch
5099311	03/24/1992	Bonde	US DOE	357/82	Si μ-ch
5005640	04/09/1991	Lapinski	McDonnell Douglas	165.160	μ-ch grooves sawed plates 4, 16
4494171	01/15/1985	Bland	Sunstrand	361/386	Diffusion bonded .010 plates, Impingement cooling
4345643	08/24/1982	Dawson	US DOD	165/122	Air-cooled plate array
			_		
	6480514 6312166 6229831 5987043 5848083 5212707 5107091 5105430 5099910 5099311 5005640	6480514 11/12/2002 6312166 11/06/2001 6229831 05/08/2001 5987043 11/16/1999 5848083 12/08/1998 5212707 05/18/1993 5107091 04/21/1992 5105430 04/14/1992 5099910 03/31/1992 5099311 03/24/1992 5005640 04/09/1991 4494171 01/15/1985	6480514 11/12/2002 Lorenzon 6312166 11/06/2001 Zediker 6229831 05/08/2001 Nightingale 5987043 11/16/1999 Brown 5848083 12/08/1998 Huden 5212707 05/18/1993 Heidel 5107091 04/21/1992 Wagner 5105430 04/14/1992 Mundinger 5099910 03/31/1992 Walpole 5099311 03/24/1992 Bonde 5005640 04/09/1991 Lapinski 4494171 01/15/1985 Bland	6480514 11/12/2002 Lorenzon Jen Optik 6312166 11/06/2001 Zediker Nuvonyx 6229831 05/08/2001 Nightingale Coherent 5987043 11/16/1999 Brown Opto Power 5848083 12/08/1998 Huden SDL 5212707 05/18/1993 Heidel McDonnell Douglas 5107091 04/21/1992 Wagner Applied Solar Energy 5105430 04/14/1992 Mundinger US DOE 5099910 03/31/1992 Walpole MiT 5099311 03/24/1992 Bonde US DOE 5005640 04/09/1991 Lapinski McDonnell Douglas 4494171 01/15/1985 Bland Sunstrand	6480514 11/12/2002 Lorenzon Jen Optik 372/35 6312166 11/06/2001 Zediker Nuvonyx 385/88 6229831 05/08/2001 Nightingale Coherent 372/36 5987043 11/16/1999 Brown Opto Power 372/36 5848083 12/08/1998 Huden SDL 372/36 5212707 05/18/1993 Heidel McDonnell Douglas 372/50 5107091 04/21/1992 Wagner Applied Solar Energy 5105430 04/14/1992 Mundinger US DOE 372/35 5099910 03/31/1992 Walpole MIT 165/80. 4 4 5099311 03/24/1992 Bonde US DOE 357/82 5005640 04/09/1991 Lapinski McDonnell Douglas 165.160 4494171 01/15/1985 Bland Sunstrand 361/386

			 	_	
- 1					
PN	JP 4-264789	9/1992 Stepped heat sink			
.11		5/1973 Stepped heat sink			

Howard R. Popper Reg. No. 19,208

Attorney for Applicant Dated: September 19, 2003

Examiner:

7/14/05